

The Dirty Bomb Prevention Act of 2005

Congressman Edward J. Markey (D-MA) and Senator Hillary Rodham Clinton (D-NY) have introduced legislation during the past two Congresses to upgrade the security of materials that could be used to construct dirty bombs. The NRC (Nuclear Regulatory Commission) said that a mere 1 Curie Dirty Bomb could contaminate several city blocks. The Federation of American Scientists found that blowing up a foot long cobalt rod would contaminate hundreds of square miles and increase the risk of death from cancer dramatically for years to follow. While there are millions of radioactive materials in circulation around the world, there exist minimal controls to secure them, dispose of them, track their locations, and prevent them from being obtained by terrorists. The Dirty Bomb Prevention Act of 2005 requires significant upgrades to their security:

- 1) Before an export, import or domestic sale of a radiation source is allowed, the regulatory agency in the recipient's country is required to certify that the recipient is authorized to possess it, and that it will be kept safe and secure. For exports from the U.S., there must also be a plan in place for the exporter to re-acquire the radiation source when it is no longer needed by the recipient. The radiation sources included are those designated as Categories 1-3 by the International Atomic Energy Agency (IAEA), as these are the types of materials (in quantities designated by the IAEA) that would be expected to threaten public health if used in a dirty bomb. The Nuclear Regulatory Commission (NRC) has proposed regulations that will accomplish some but not all of the requirements in the Act.
- 2) Within 6 months of enactment, the NRC must develop a "cradle-to-grave" tracking system recommended by many security experts to ensure that it will be aware of where all radiation sources within the U.S., are located, and promptly informed whenever a radiation source changes geographic location. The NRC currently views the provision of such information to be voluntary, and does not expect to have a tracking system in place until 2007.
- 3) The National Academy of Sciences must conduct an assessment of whether some current industrial uses of radiation sources could be replaced with non-radioactive or less dangerous radioactive materials.
- 4) An inter-agency task force on radiation source protection will be created, and will provide periodic recommendations to Congress and the NRC regarding the regulations associated with the safety and security of radiation sources.
- 5) The NRC must promulgate regulations to assume regulatory authority, which it does not currently have, over naturally-occurring and accelerator-produced radioactive materials that could be used to make a dirty bomb.
- 6) The Department of Energy (DOE) must report to Congress regarding the status of nuclear fuel and radiation sources exported by the U.S. Government to other countries, must reacquire these materials with priority given to those that are viewed as being least secure, and funds are authorized at levels of \$80 million/year for the next 5 years for these activities.